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ABSTRACT

Field research was conducted to evaluate the workgroup meetings of an organization. The evaluation served to determine whether management's established objectives for the meetings were reached and to develop research strategies useful in examining individual communication activities. Two questionnaires (for supervisory/nonsupervisory personnel) and organizational records (the minutes of the meetings) were used to collect the data. Statistical tests were applied to determine whether the communication program was effective in achieving the six goals that were established. It was concluded that the workgroup meetings, as perceived by the participants, achieved the goals set down by management at the program's inception. Although all individual goals were perceived to be achieved at fairly high levels of effectiveness, the goals that attained the highest levels were the informative, integrative, and adaptive goals. A slightly lower level of achievement was perceived for productivity goals. (Author/RL)

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COMMUNICATION IN ORGANIZATIONS: - APPRAISAL OF WORKGROUP MEETING EFFECTIVENESS

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COMMUNICATION IN ORGANIZATIONS: -
APPRAISAL OF WORKGROUP MEETING EFFECTIVENESS

The field study of organizational communication activities is not a new area of empirical research. Early works included Odiorne (1954) and several doctoral dissertations (see Nilsen, 1953; Ross, 1954; Piersol, 1955; Funk, 1956; and Level, 1959). In the 1960's, in addition to the major contribution of Georgopoulos and Mann (1962), the number of doctoral dissertations representing case studies of organizational communication increased significantly (see Pace, 1960; Sanborn, 1961; Simons, 1961; Tompkins, 1962; Kelly, 1962; Miraglia, 1963; Pyron, 1964; Smith, 1967; Zima, 1968; Richetto, 1969; and Mintner, 1969); and the literature had grown to the size that warranted state-of-art reviews (see Redding, 1966; and Tompkins, 1967). In the 1970's, there were many individual and organizational contributions to the field study of communication in organizations. The International Communication Association sponsored in-depth conceptual and empirical investigations (see Wood, Perrill and Buley, 1975; Yates, 1976; Goldhaber, 1976; Richetto and Dennis, 1976; Falcione, 1976; and Jain, 1977; etc.) which were coincidentally being carried out in Finland by the Institute of Human Communication under the leadership of Osmo A. Wiio (1974, 1977, 1978) and U.E. Moisala (1975); and the production of doctoral dissertations in this area continued unabated (see Barker, 1976; Mazzaroppi, 1976; etc.); along with many conceptual works relative to field study procedures (see Greenbaum, 1974; Sincoff, Williams and Rohm, 1976; Barker and Timm, 1976; Goldhaber and Krivonos, 1977; and Sincoff and Goyer, 1977). This growth of the literature over a 25-year period was accompanied by works devoted to the classification and interpretation

of writings (see Redding, 1972; Carter, 1972; Roberts and O'Reilly, 1974; Goldhaber, 1974; and Falcione and Greenbaum, 1977).

To the largest extent, field research of organizational communication activities has been concerned with the overall communication system including supervisor-subordinate relationships, message-flow analysis (content, direction, distortion), and the adequacy of organization-wide communication, as fulfilled by company publications, bulletin board notices, the grapevine, and other media. The various studies employing the International Communication Association Communication Audit are truly investigations in field settings, but generally do not focus upon small-group communication. These studies and most other case studies represent tests of general communication satisfaction and networks as derived from questionnaires, interviews, and the application of critical incident measurement techniques.

Although there have been a large number of small-group studies by social scientists, the majority have been accomplished in laboratory settings or have been affected by laboratory-type controls, and less than five percent have been done in natural settings (McGrath and Altman, 1966; Mears, 1974). Researchers who have selected the small-group natural setting as their central interest include Borwick (1969), Bales (1970), Brinkerhoff (1972), Nelson (1972), Mears (1974), Spataro and Greenbaum (1975), Baskin and Hamby (1976), and Penley (1977).

This paper is intended to add to small-group research findings in natural settings. In their comprehensive evaluation of the small-group field, McGrath and Altman (1966) called for research that utilizes a range of strategies and settings, building from the study of actual social phenomena, by way of theory, to controlled

experimentation, and back to actual situations for validation of laboratory findings. Our investigation subscribes to that point of view while furnishing a model for the analysis of individual communication activities. The vehicle to accomplish this is a field research project concerned with small-group meetings in an industrial organization during the five years 1968-1973.

Purpose and Plan of the Study

The primary purpose of this field research study is to evaluate the workgroup meetings of the client organization in terms of objectives established by management at the inception of the program. The presentation includes a description of the program, an explanation of the research design, analysis of the data and findings, and conclusions as to the effectiveness of the communication program -- i.e., as to whether the goals of management were achieved. In addition, there is provided an appendix describing the client organization in considerable detail, including (1) history, situational factors, and functional relationships, (2) personnel, (3) leadership style and motivational elements, (4) communication skills, and (5) the overall communication system.

THE WORKGROUP MEETING PROGRAM

Objectives

At the inception of the workgroup meeting program, management wished to employ participative group methods to obtain higher levels of effectiveness for the organization. The linking-pin approach to good horizontal and vertical communication was the model (Likert, 1967). It was intended to motivate higher levels of productivity as a result of developing favorable employee attitudes toward supervisor

and organization while establishing meaningful goals and objectives. Employees were informed that the objectives of the periodic workgroup meetings were to resolve work-related problems, improve working conditions, increase coordination and efficiency, and increase the knowledge of individuals as to the operations of the immediate work area and the balance of the organization. The workgroup meeting program was viewed as a structured communication activity that would promote the free flow of ideas and information both upward and downward, remove obstacles impairing performance, and improve attitudes of individuals toward supervisor, group and organization (Wohlking, 1970).

Description of the Workgroup Meeting Communication Activity

Each group of 4 to 11 persons was scheduled to meet once a month in a private conference room during normal business hours for a period of 45 to 60 minutes. Topics for discussion at the meeting came from all group members and the chairperson. Various devices were employed to render it easy to place subjects on the agenda. In general, the chairperson was the work supervisor. Each chairperson had a simple meeting manual stressing that the chairperson should talk as little as possible in order to obtain maximum employee participation, that the group members should be considered as counselors, and that the group decision must have the chair's approval as the chairperson takes responsibility for group decisions. Both before and after the meeting, the chairperson was assisted by staff personnel who prepared both hardware and software tools. The hardware consisted of meeting room facilities, blackboard, easel, and overhead projector. The software included a typed summary of the previous meeting, a list of topics awaiting discussion, and a standard minute-taking form that facilitated the recording of minutes by a member of the work section.

The standard form for notation of minutes was a major software element in workgroup meeting communication providing for notation of the subject title, explanation of the problem or topic, group recommendations and follow-up action decided upon by the group. During the meeting, one of the members acted as secretary and recorded the minutes. After the meeting, the chairperson viewed and signed-off the minutes as being correct, and the clerical staff prepared typed copy for the record and for use on the overhead projector at the following session for the purpose of reminding participants about previous decisions and follow-up responsibilities. Subjects placed in the minutes of one meeting could only be eliminated from further consideration after appearing in a subsequent meeting and noted as not requiring any further follow-up. Therefore subjects could show in the minutes for a minimum of two meetings, or for as many as six, seven or more meetings until cleared by the indication that no further follow-up was required.

Table 1 illustrates the procedure for handling a problem from point of origin to point of resolution. Subject No. 1 "Safety Pertaining to Hi-Low Driving" originated at the March 1, 1972 meeting, but required three meetings to resolve. At the first meeting the workgroup asked the supervisor to do something about the high speeds at which the forklifts were operating, endangering other workers in the area. At the April 11, 1972 meeting, the situation had not improved, and it was group consensus that, if the careless driving was not stopped, it would be necessary to install speed-governors so lifts could not be driven above a certain speed. At the May 24, 1972 meeting, the subject was closed out after the group confirmed that the

situation had improved as a result of the supervisor speaking to the offenders, and therefore the speed-governors were not necessary.

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Table 1 about here
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The 17 workgroups held a total of 710 meetings during the approximately five-year period under study. They averaged 42 meetings per group with a high of 63 and a low of 30. A total of 2,041 topics were brought up during the period, an average of three topics per meeting. Average resolution time was 11.6 weeks, or slightly less than two meetings following the meeting in which the problem was first recognized. Mid-morning and late-afternoon meetings were the most common with most meetings requiring 30 to 45 minutes. Sixty-one percent of the meeting leaders required less than 30 minutes to prepare for meetings, while 39% of the leaders indicated preparation time of 30 minutes to one or two hours. Half of the chairpersons spent one hour or less in follow-up activities, while half indicated that follow-up required more than one hour per meeting.

Composition of Groups

During the period studied, there were 17 workgroups in operation. Five of the 17 groups worked in a warehouse activity and 12 of the groups worked in an office activity. Of the five warehouse groups, four involved non-supervisory personnel with a first-line supervisor as chairperson, while one meeting consisted of the warehouse operations manager as chairperson and the four first-line supervisors as meeting members. In the office groups, ten involved non-supervisory personnel with a first-line supervisor as chairperson, while two meeting groups were chaired by a middle manager and the other participants were first-line supervisors. Membership in all workgroup meetings totaled 114

persons, with an average of six per workgroup, and a range of three to eleven members. Chairpersons included five females and 13 males. One group had alternating chairpersons.

The participants averaged 7.3 years of work with the company, the supervisors averaging 10.2 years and the hourly workers averaging 4.6 years. The non-supervisory members averaged 12 years of formal education, with the supervisory personnel slightly higher at 12.8 years. One-third of the participants were male, two-thirds female, and 71% were married. Ages ranged from 18 to 65, hourly workers averaging 40 years and supervisors averaging 46 years.

RESEARCH DESIGN

The Research Question and Operational Definitions

In November, 1974, the research question was stated as follows: "Has the workgroup meeting communication activity achieved the goals set down by management at the inception of the program in 1968?" The communication activity is defined and described above. The specific goals are listed below:

1- To increase organizational effectiveness by improving individual and group productivity through the resolution of problems, the development of team work, and the institution of improvements.

2- To provide an efficient channel of communication for supervisory and non-supervisory employees whereby ideas can be exchanged and discussed.

3- To encourage frank discussions of work-related problems.

4- To provide a formal structure whereby all employees can learn more details about the operation of their work area, and whereby all employees can participate in a program for improving or revising methods of operation, working conditions, and company policies.

5- To develop positive employee attitudes toward their jobs, supervisors, and the company by establishing a work environment that supports two-way communication and provides the means to encourage participation in the problems of both the work area and the company.

6- To facilitate administration, management, and coordination by securing effective vertical and horizontal communication.

The above goals were presented to management prior to the start of the program, and the decision to initiate the program was based on the understanding that these goals could be substantially achieved, thereby furnishing benefits far in excess of estimated costs.

Overview of Methods

Data collection instruments included the use of questionnaires and organization records related to the workgroup meeting program. The development of the questionnaires will be explained more fully below. The organization records consisted of meeting minutes representing formal notations of meeting proceedings taken at each meeting by one of the participants and verified by the meeting chairperson. Significant elements were drawn from 710 meetings and stored in the computer. Selected statistics from that knowledge base have been mentioned above in the description of the program. It is planned that a future paper will analyze behavioral differences of the 17 workgroups for the period under study. This paper is devoted to the study of the workgroup meeting activity viewed as a single unit.

One hundred and eight persons filled out one of the two questionnaires, a 95% response, in effect the entire population. The survey was taken during regularly scheduled workgroup meetings over a five-week period in the Fall of 1974. Prior to the meeting at which the survey was administered, the groups were notified through a written memorandum about the details of the study. They were told that Ohio

University was conducting the study, that the Company would not see individual responses, and that they were not to sign their names to the questionnaires. After completing the instruments, the respondents individually inserted the completed questionnaire into pre-addressed envelopes and delivered them to the Company mailroom. The envelopes were received by one of the authors at the College of Business, Ohio University, Athens, Ohio, and all data processing followed at that location. Subsequently, a summary report was furnished to the Company as to findings, on the basis of which a clinic was held for improving the program. The program is still continuing, as of April 1979.

Development and Testing of Questionnaires

On the basis of a review of workgroup meeting objectives, and the minutes generated by the meetings, two questionnaires were prepared, one for meeting leaders and one for participants. The six goals stated at the inception of the meeting program formed the basis for the thirteen questions asked of the group members in one section of each type of questionnaire. Table 2 shows the workgroup meeting objectives and the questions related to each of the objectives. In general, each objective was investigated via two questions, except for objective five with four questions, and objective six with one question. The respondents were requested to indicate their perceptions as to the contribution of the workgroup meeting program to organizational goals by answering questions linked to such goals and allowing for responses on a five-part scale, as illustrated below:

Do workgroup meetings increase amount of useful information from supervisor to workers?

Very Effective_____
Fairly Effective____
Neutral_____
Fairly INeffective__
Very Ineffective____

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Table 2 about here
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The questions shown in Table 2 were utilized in the questionnaire designed for meeting participants other than the supervisor. The wording of the supervisor questionnaire included identical questions except that the wording was adapted so as to suit the supervisor as a respondent.

Prior to the administration of the questionnaire, steps were taken to test the instruments with respondents representative of the total population studied. The supervisor of one of the workgroups was introduced to the purpose of the study and asked to answer the supervisor questionnaire and to have group members answer the non-supervisory questionnaire. This was followed by a discussion of each question and problems of understanding. As a result, some of the questions were revised to insure greater clarity.

Reliability and Validity Data

The obtained split-half reliability estimate of the 13-question instrument was .965; and the obtained item-analysis reliability relative to each of the questions ranged from .67 to .85, with an average of .79.

Validity of the measurement instrument, prior to administration, was protected by the employment of a logical design, whereby the 13 questions were carefully developed from the six program objectives; and the formulated questions were critiqued by selected supervisory and non-supervisory staff.

Validity of the findings were tested by correlation of the attitudinal responses gained from the questionnaire with more behavioral evidences contained in organization records in the form of minutes of the workgroup meetings. From the records, it was possible to obtain

comprehensive descriptions of topics discussed, percent resolved, and average resolution time, and to relate such topics to each of the basic objectives of the communication program. Attempts to apply Spearman's rank order correlation coefficient in a two-tailed test of the null hypothesis failed to secure a level of significance at the .05 level that would reject the hypothesis of no correlation between the rank order of effectiveness derived for each objective in the questionnaire attitudinal survey and the rank order of discussion frequency for each objective as evidenced in the organization records. This result can be explained by the fact that the effectiveness scores for all objectives (See Findings) were so high and so close together; and the researchers believe that the lack of rank order correlation, between effectiveness of objectives and frequency of topic discussion, is not a challenge to the validity of the instrument. Of the 2,041 topics discussed in the five-year period, literally hundreds of topics related to each of the six objectives, with many topics relating to more than one of the objectives. The relatively high order of effectiveness of the communication program objectives as reported by the questionnaire is supported by the behavioral evidences contained in meeting minutes, that discussions were being held and problems were being resolved in the areas of each of the different objectives; but attitudes as to the relative success in the accomplishment of the different objectives do not coincide with topic frequency related to such objectives.

Limitations of Research Design

In the language of research design, this work is a one-shot case study that is more descriptive than experimental. Nonetheless, the researchers hold the view that the workgroup meeting communication

program constitutes an independent or moderating variable in the organization influencing the attainment of the outcome variables of morale, performance, and adaptiveness. However, this is a field study, so it was not practical to control other variables and therefore the findings may well be influenced by other factors (See Appendix).

While the primary purpose of this study is to evaluate the work-group meetings in terms of objectives established by management at the start of the program, and although five years of meetings had been experienced by the organization (1968-1973), the data collection late in 1974 can only be viewed as securing the perceptions of the participants that were formed in the last year or two. It is possible that participants underwent a cycle in attitude formation, whereby opinions and feelings in the first year of the program were later changed by positive or negative events relating directly or indirectly to the meetings; and that a similar study after only one year of communication program operation might have derived other findings.

Practical considerations have compelled us to limit this paper to a study of all the workgroups as one unit rather than analyzing the differences and similarities among groups; and to obtain data mainly through an attitudinal questionnaire instrument rather than more behaviorally-based records, as represented by meeting minutes. It is possible that a future paper will correct this limitation of research design, thereby producing a longitudinal analysis relating to each of the years and each of the workgroups.

ANALYSIS OF DATA AND FINDINGS

Two major analytic approaches are possible in processing the data represented by the responses to thirteen questions by 108 employees representing 17 workgroups: (1) study the responses of individual workgroups, establishing appropriate statistical measures for each

workgroup and each question, and comparing the measurements among groups; and (2) treat all groups as one unit, combining all responses to each of the thirteen questions into one overall organization response for that question, and to study their meaning in terms of the degree to which the general objective and each of the specific objectives were attained. In this paper, the second approach has been taken, while recognizing that a future work could usefully be applied to the other approach.

Test #1: An Overall Assessment of Effectiveness

Two statistical techniques were applied to determine whether the workgroup meeting program was effective in achieving planned goals, considering the six objectives as a single entity: (1) the Z test based on parametric logic and the standard normal curve; and (2) the Chi-Square test of goodness of fit based on non-parametric principles.

The Z Test of Significance. The totals derived from the questionnaire yielded 1,355 answers out of a possible 1,404 with the following distribution: Very Effective, 464; Fairly Effective, 575; Neutral, 201; Fairly Ineffective, 82; and Very Ineffective, 33. The mean value of 4.00 and the standard deviation of .80 was obtained by applying the following valuative scheme: Very Effective, 5; Fairly Effective, 4; Neutral, 3; Fairly Ineffective, 2; and Very Ineffective, 1.

To determine whether the mean value of the responses (4.00) was statistically significant, the following hypotheses were tested:

Null hypothesis (H_o): The true but unknown population mean response is 3, that is, "neutral", neither effective nor ineffective.

Alternative hypothesis (H_1): The true but unknown population mean response is greater than 3, that is, effective.

At the significance level of ,01 in a one-tailed test, the critical region for rejection of H_o is Z equal to or greater than +2.325. Employing an appropriate random variable for the statistical test yields a Z value of 46.0. This value of Z is so strikingly large that the null hypothesis is overwhelmingly rejected, and in light of the positive (+) Z value, the alternative hypothesis is accepted -- i.e., one can conclude that the workgroups are effective.

The Chi-Square Test. A second assessment of effectiveness, relying on non-parametric foundations, can be based upon a Chi-Square test of goodness of fit. It is plausible to assume that if the workgroups are neutral (neither effective nor ineffective in achieving organization goals), one would expect to find as many respondents rating the workgroups "fairly ineffective" as rating them "fairly effective". Similarly, the expected number of "very effective" responses should equal the number of "very ineffective" responses.

Employing an alpha of .01 and recognizing four degrees of freedom in a one-tailed test, the Chi-Square value of 13.3 is required for significance. If it is considered that there are only two degrees of freedom, the Chi-Square value of 9.2 is required for significance and rejection of the null hypothesis. As noted in Table 3, the calculated Chi-Square value is 743.7, much in excess of either critical value. Therefore, we may reject the null hypothesis that respondents are approximately evenly divided as to the effectiveness or ineffectiveness of the meetings; and assert that the workgroup meeting program is effective, in the perception of the participants.

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Table 3 about here
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Test #2: Individual Questions Related to Specific Company Goals

As in the test for the overall assessment of effectiveness, the Z test and the Chi-Square test were applied so as to examine the extent to which each of the six original goals had been achieved. Each of the thirteen questions was related to a specific goal, as per Table 2 above, and the responses for all the questions bearing upon a single objective were summed into one composite distribution of responses, as per Table 4. Thus, questions 1 and 2 form a composite relevant to objective 1 consisting of 44, Very Effective; 87, Fairly Effective; 57, Neutral; 13, Fairly Ineffective; and 6, Very Ineffective responses, for a total of 207 responses.

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Table 4 about here
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The composite scores relative to each objective were analyzed by two methods: (1) a Z test based on the standard normal distribution of the sample mean, at the .01 significance level, with the null hypothesis that the population mean equal 3 (Neutral) and the alternative hypothesis that the population mean is greater than 3, and hence "Effective"; and (2) a Chi-Square test for symmetry at the .01 significance level under which the null hypothesis is tested that respondents are approximately evenly divided as to "Effective", "Neutral", and "Ineffective" ratings, and the alternative hypothesis maintains that respondents are not evenly divided and there is a significant difference to the side of "Effective".

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Table 5 about here
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The results of the Z tests and Chi-Square tests for each of the six objectives are shown in Table 5. In each case, the null hypothesis was rejected -- i.e., the workgroup meetings, as perceived by the

participants, are not neutral in their effectiveness in obtaining the six individual objectives. Each of the six objectives, in terms of the Z test and the Chi-Square tests of significance, obtained values much in excess of the critical value of significance.

While the two types of tests do not yield the same rank order of achievement, it does appear that participants perceived the program to best satisfy the informative, integrative, and adaptive-innovative goals (Objectives 1, 3, 4, and 5), while still achieving levels of significance in respect to regulative and task goals (Objectives 1 and 6). In terms of the major intervening variables of Price (1968) related to organizational effectiveness, the workgroup meetings for this particular organization materially influenced the levels of effectiveness as to Morale (Objectives 3, 4, and 5), Institutionalization (Objectives 4 and 5), Conformity to Plans (Objectives 1, 2, 3, and 6), Adaptiveness-Innovation (Objectives 1, 3, 4, and 5), and Productivity (Objectives 1 and 6).

Degree of Effectiveness

The preceding has indicated that the workgroup meetings, as perceived by the participants, were not neutral in their effect upon obtaining the overall objective and each of the six individual objectives; and that the meetings were effective. The question may be asked as to how effective were the meetings in reaching each of the objectives and the overall objective. For the purpose of answering this question, Table 6 presents a summary of respondent perceptions of workgroup meeting effectiveness furnishing detail as to each objective.

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Table 6 about here
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For all objectives as a group, 77% of the responses indicated that the meetings effectively achieved objectives, 15% were neutral

and 8% indicated that the meetings were ineffective. Objective 3, as to meetings encouraging frank discussion of work-related problems, had the highest level of effectiveness, 87%; and Objective 1, as to meetings increasing productivity through problem resolution, teamwork development, and the institution of improvements, had the lowest level of effectiveness, 63%, with 28% "neutral", and 9% noted "ineffective". The large percentage of "neutral" responses for Objective 1 questions, fully 50% more than that accorded any other objective, suggests that respondents had difficulty with interpreting the concept of "productivity" in questions 1 and 2 of the survey instrument.

From a perspective of the entire organization and all organization members, the attempt to measure degree of effectiveness by means of the data in Table 6 above requires one to consider not only the responses of "effective", but also those of "neutral" and "ineffective" -- i.e., to consider more than one statistic in order to evaluate the effect on the total organization. In recognition of this difficulty, Table 7 presents a concept of relative effectiveness that provides for a single index of effectiveness for each of the objectives, and for all objectives viewed as a group.

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Table 7 about here
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For each objective, the mean response is reduced by the assigned weight of "neutral" (i.e., 3) to obtain a net measure of effectiveness (NME) for that objective. The NME for the objective is divided by the NME for "very effective" (i.e., 2) to obtain an index of effectiveness.

For all objectives as a group the NME is 50%, exactly equal to the NME index for "fairly effective". Objective 3 has the highest NME index at 63%, and Objective 1 has the lowest NME index at 36%. All effectiveness ratios are above the 50% level ("fairly effective")

except for Objectives 1 and 5, which are 36% and 43% respectively of the "very effective" NME index, and 72% and 86% respectively of the "fairly effective" NME index.

CONCLUSIONS

The statistical analyses described above support the conclusion that the workgroup meeting program, as perceived by the participants, achieved the goals set down by management at the inception of that structured communication activity.

The approach taken in this paper was to treat all workgroups as one unit, combining all responses into one overall organization response for each of the questions, and to study the meaning of such responses in terms of 1) the general achievement of the original objectives, viewed in total, and 2) the degree to which each of the individual objectives was achieved. The statistical tests relative to the general achievement of original objectives, one based on a parametric design and the other on a non-parametric design, concluded that the workgroup meetings were effective, as perceived by the participants. Similarly, in respect to each of the objectives, the application of the same statistical tests indicated that all objectives had been achieved, with the greatest agreement in respect to informative, integrative and adaptive goals, and a lower level of consensus in respect to productivity goals.

The basic purpose of this study was to evaluate a specific communication activity as distinct from assessing the overall communication system so as to implement aspects of communication appraisal theory and to develop research strategies that could be useful in the examination of other group communication activities. The foregoing analysis of a small-group meeting program utilizes methodologies

capable of being integrated into the formal control processes of an organization as part of the periodic evaluation of communication in the organization. The statistical analyses herein are intended to contribute to the development of methodology for assessing the effectiveness of organizational communication at the level of individual communication activities.

Further research in the evaluation of individual communication activities can be recommended in respect to interpersonal communication, inter-group communication and inter-organizational communication. Detailed studies in these areas are needed to provide a knowledge base that is more detailed than findings derived from overall communication system analysis. In general, the overall analysis should be considered as an initial and exploratory step in the accomplishment of a complete communication system appraisal; and the evaluation of the individual communication activities as a detailed follow-up based on the foundation supplied by the overall audit, and the leads furnished by the general examination of communication within the organization.

TABLE 1

Start to Finish Handling of a Problem
Requiring Discussion at Three Meetings

Date of Meeting	Subject & Nature of Problem	Group Recommendation	Follow-up
3/1/72	1. Safety - Hi-Lo (Forklift) Driving	Any person operating Hi-Lo or any piece of equipment must be extremely careful. If a Hi-Lo must go through stock aisle, extreme care must be taken not to hit stock wagons or people.	Tom to speak to all operators of equipment.
4/11/72	1. Safety - Hi-Lo (Forklift) Driving	Hi-Lo operators have not yet diminished speeds. This includes packaging, shipping and receiving dept. If this is not done speed governors should be placed on hi-los.	Tom to see all Supervisors & hi-lo operators.
5/24/72	1. Safety Hi-Lo (Forklift) Driving	All supervisors and hi-lo (Forklift) operators were advised and indicated they would exercise care. Speed governors were not considered necessary.	NONE

TABLE 2

Workgroup Meeting Objectives and Related Questions

Workgroup Meeting Objectives	Related Questions
	Do workgroup meetings. . .
1. To improve organizational effectiveness by improving individual and group productivity through the resolution of problems, the development of team work, and the institution of improvements.	1) . . . Increase your productivity?
	2) . . . Increase productivity of entire workgroup?
2. To provide an efficient channel of communication for supervisory and non-supervisory employees whereby ideas can be exchanged and discussed.	3) . . . Increase amount of useful information from supervisor to workers?
	4) . . . Increase amount of useful information from workers to supervisor?
3. To encourage frank discussions of work-related problems.	5) . . . Increase communications among your fellow workers?
	6) . . . Give you a good opportunity to talk over work-related problems?
4. To provide a formal structure whereby all employees can learn more details about the operation of their work area, and whereby all employees can participate in a program improving or revising methods of operation, working conditions, and company policies.	7) . . . Give you a good opportunity to learn more details about operation of your work area?
	8) . . . Give you a good opportunity to participate in improving methods of operation, working conditions, and/or company policies?
5. To develop positive employee attitudes toward their jobs, supervisors, and the company by establishing a work environment that supports two-way communication and provides the means to encourage participation in the problems of both the work area and the company.	9) . . . Help to make work more interesting for you?
	10) . . . Help to make work more interesting for entire workgroup?
	11) . . . Improve workers' attitude toward their jobs, supervisors and/or the company?

TABLE 2
(continued)

Workgroup Meeting Objectives	Related Questions
	12) . . . Improve your attitude toward your job, supervisor, and/or company?
6. To facilitate administration, management and coordination by securing effective vertical and horizontal communication.	13) . . . Help supervisor perform his tasks?

TABLE 3

Derivation of Chi-Square Value Relative to Achievement of the Overall Objectives of Workgroup Meetings[1]

	Very Effective	Fairly Effective	Neutral	Fairly Ineffective	Very Ineffective
Observed O_J	464	575	201	82	33
Expected E_J	248½ [a]	328½ [b]	201	328½ [b]	248½ [a]

$$\text{Chi-Square} = \sum_{j=1}^{5} \frac{(O_J - E_J)^2}{E_J} = 743.7$$

[a] $\frac{464 + 33}{2} = 248\frac{1}{2}$

[b] $\frac{575 + 82}{2} = 328\frac{1}{2}$

[1] We actually have 108 independent observations and not thirteen times that many. Strictly speaking, the statistical tests should be reformulated slightly to recognize this. But the statistical significance is the same either way so that we have chosen to give the present formulation because of its simplicity.

TABLE 4

Frequency Distributions of Responses to the Thirteen Questions and Relation of Questions to the Six Objectives

	Very Effective	Fairly Effective	Neutral	Fairly Ineffective	Very Ineffective	Total	Objective
Question 1	21	47	28	6	3	105	
Question 2	23	40	29	7	3	102	01
TOTAL	44	87	57	13	6	207	
Question 3	35	53	7	6	4	105	
Question 4	40	46	8	7	2	103	02
TOTAL	75	99	15	13	6	208	
Question 5	40	48	9	5	2	104	
Question 6	57	37	8	1	2	105	03
TOTAL	97	85	17	6	4	209	
Question 7	53	33	12	6	1	105	
Question 8	43	43	13	4	2	105	04
TOTAL	96	76	25	10	3	210	
Question 9	25	47	24	6	2	104	
Question 10	21	47	25	7	3	103	
Question 11	38	42	14	9	2	105	05
Question 12	27	50	14	10	3	104	
TOTAL	111	186	77	32	10	416	

TABLE 4
(continued)

	Very Effective	Fairly Effective	Neutral	Fairly Ineffective	Very Ineffective	Total	Objective
Question 13	41	42	10	8	4	105	06
GRAND TOTALS	464	575	201	82	33	1355	

TABLE 5

Results of Z Tests and Chi-Square Tests Relative to Achievement of Each of Six Objectives of Workgroup Meetings

Objective	$\bar{X}$	S	Z	Z Critical[a]	X^2	X^2 Critical[a]
1	3.725	.946	11.0	2.325	83.6	13.3
2	4.077	.970	16.0	2.325	124.8	13.3
3	4.268	.875	21.0	2.325	154.2	13.3
4	4.200	.927	18.8	2.325	138.0	13.3
5	3.856	.979	17.8	2.325	193.1	13.3
6	4.029	1.069	9.9	2.325	53.5	13.3

[a] Significance level of .01 (one-tailed test).

Chi-Square critical values are at 4 degrees of freedom.

TABLE 6

Respondent Perceptions of Workgroup Meeting Effectiveness as Indicated by Response Categories Effective, Neutral and Ineffective

Objective	Survey Questions	Percent of Total Responses		
		Effective	Neutral	Ineffective
1	1-2	63%	28%	9%
2	3-4	84	7	9
3	5-6	87	8	5
4	7-8	82	12	6
5	9-12	71	19	10
6	13	79	10	11
1-6	1-13	77	15	8

TABLE 7

Net Measures of Effectiveness for Each of Six Objectives and Overall Objectives of Workgroup Meetings

Objective	Questions	Mean Response[1]	Neutral Value[2]	Net Measure of Effectiveness -NME-[3]	NME Index[4]
1	1-2	3.725	3.0	.725	36%
2	3-4	4.077	3.0	1.077	54
3	5-6	4.268	3.0	1.268	63
4	7-8	4.200	3.0	1.200	60
5	9-12	3.856	3.0	.856	43
6	13	4.029	3.0	1.029	52
1-6	1-13	4.000	3.0	1.000	50
Reference Standards					
Fairly Effective		4.000	3.0	1.0	50%
Very Effective		5.000	3.0	2.0	100
Neutral		3.000	3.0	0.0	0
Fairly Ineffective		2.000	3.0	-1.0	- 50
Very Ineffective		1.000	3.0	-2.0	-100

[1] See Table 5.

[2] Weighting given to scale responses were as follows: Very Effective, 5; Fairly Effective, 4; Neutral, 3; Fairly Ineffective, 2; Very Ineffective, 1.

[3] Mean response less neutral weight of 3.

[4] Net Measure of Effectiveness of each objective divided by Net Measure of Effectiveness of the concept "Very Effective", the maximum effectiveness attainable.

REFERENCES

Bales, R.F.
1970 Personality and Interpersonal Behavior. New York: Holt, Rinehart and Winston.

Barker, R.T.
1976 "The Development and Implementation of a Communication Audit Related to Selected Systems Concepts." Ph.D. Dissertation. The Florida State University.

Barker, R.T., and P.R. Timm.
1976 "Merits of Communication Auditing Techniques as Evaluated by Practitioners." Paper presented at the Annual Meeting of the International Communication Association. Portland, Oregon.

Baskin, O., and J.K. Hamby.
1976 "A Content Analysis of Group Meeting Communication in an Industrial Plant." Paper presented at the Annual Meeting of the Academy of Management. Kansas City, Missouri.

Borwick, I.
1969 "Team Improvement Laboratory." Personnel Journal, 48: 18-24.

Brinkerhoff, M.B.
1972 "Hierarchichal Status, Contingencies, and the Administrative Staff Conference." Administrative Science Quarterly, 17: 395-407.

Burhans, D.
1972 "The Development and Field Testing of Two Internal Communication Measuring Instruments." Paper presented at the Annual Meeting of the International Communication Association. Atlanta, Georgia.

Carter, R.M.
1972 Communication in Organizations: An Annotated Bibliography and Sourcebook. Detroit, Michigan: Gale Research Company.

Falcione, R.L.
1976 "Communication Audit of a U.S. Senator's Office." Paper presented at the Annual Meeting of the Academy of Management. Kansas City, Missouri.

Falcione, R.L., and H.H. Greenbaum.
1977 Organizational Communication 1976: Abstracts, Analysis and Overview. Urbana, Illinois: A joint publication of American Business Communication Association and the International Communication Association.

Funk, F.E.
1956 "Communication Attitudes of Industrial Foremen as Related to Their Rated Productivity." Ph.D. Dissertation. Purdue University.

Georgopoulos, B.S., and F.C. Mann.
1962 The Community General Hospital. New York: Macmillan.

Goldhaber, G.M.
1974 Organizational Communication. Dubuque, Iowa: William C. Brown Company.

Goldhaber, G.M.
1976 "The ICA Communication Audit: Rationale and Development." Paper presented at the Annual Meeting of the Academy of Management. Kansas City, Missouri.

Goldhaber, G.M., and P.D. Krivonos.
1977 "The ICA Communication Audit: Process, Status, Critique." The Journal of Business Communication, 15: 41-55.

Greenbaum, H.H.
1974 "The Audit of Organizational Communication." Academy of Management Journal, 17: 750-752.

Jain, H.C.
1973 "Supervisory Communication and Performance in Urban Hospitals." The Journal of Communication, 23: 103-117.

Jain, H.C.
1977 "Organizational Communication: A Case Study of a Large Urban Hospital." Industrial Communication Industrielles, 31: 588-608.

Kelly, C.M.
1962 "Actual Listening Behavior of Industrial Supervisors, as Related to Listening Ability, General Mental Ability, Selected Personality Factors and Supervisory Effectiveness." Ph.D. Dissertation. Purdue University.

Level, D.A.
1959 "A Case Study of Internal and External Communication Practices in an Urban Bank." Ph.D. Dissertation. Purdue University.

Likert, R.
1967 The Human Organization. New York: McGraw-Hill.

Mazzaroppi, L.L.
1976 "A Study to Develop Generally Accepted Standards for Use in Conducting Organizational Communication Audits within Industrial Organizations." Ph.D. Dissertation. Louisiana State University.

Mears, P.
1974 "Structuring Communication in a Working Group." Journal of Communication, 24: 71-79.

McGrath, J.E., and I. Altman.
1966 Small Group Research: A Synthesis and Critique of the Field. New York: Holt, Rinehart and Winston, Inc.

Minter, R.L.
1969 "A Comparative Analysis of Managerial Communication in Two Divisions of a Large Manufacturing Company." Ph.D. Dissertation. Purdue University.

Miraglia, J.F.
1963 "An Experimental Study of the Effects of Communication Training upon Perceived Job Performance of Nursing Supervisors in Two Urban Hospitals." Ph.D. Dissertation. Purdue University.

Moisala, U.E.
1975 "Internal Communication Levels in an Organization's Productive Activity, and the Position of Personnel." The Finnish Journal of Business Economics, Special Edition 4: 279-289.

Nelson, M.J.B.
1972 "An Analysis of Factors Contributing to the Intragroup Communication Effectiveness of Small Work Group Supervisors in Selected Oklahoma Business, Manufacturing and Government Service Situations." Ph.D. Dissertation. University of Oklahoma.

Nilsen, T.R.
1953 "The Communication Survey: A Study of Communication Problems in Three Office and Factory Units." Ph.D. Dissertation. Northwestern University.

Odiorne, G.
1954 "An Application of the Communication Audit." Personnel Psychology, 7: 235-243.

Pace, R.W.
1960 "An Analysis of Selected Oral Communication Attributes of Direct-Selling Representatives as Related to Their Sales Effectiveness." Ph.D. Dissertation. Purdue University.

Penley, L.E.
1977 "Organizational Communication: Its Relations to the Structure of Work Groups." In R.C. Huseman, et al., Readings in Interpersonal and Organizational Communication. Boston: Holbrook Press.

Piersol, D.T.
1955 "A Case Study of Oral Communication Practices in a Mid-Western Corporation." Ph.D. Dissertation. Purdue University.

Price, J.L.
1968 Organizational Effectiveness: An Inventory of Propositions. Homewood, Ill.: R.D. Irwin.

Pyron, H.C.
1964 "The Construction and Validation of a Forced-Choice Scale for Measuring Oral Communication Attitudes of Industrial Foremen." Ph.D. Dissertation. Purdue University.

Redding, C.W.
1966 "The Empirical Study of Human Communication in Business and Industry." In Paul E. Ried, Frontiers in Experimental Speech Communication Research. Syracuse, N.Y.: Syracuse University Press.

Redding, C.W.
1972 Communication within the Organization: An Interpretative Review of Theory and Research. New York: Industrial Communication Council Inc.

Richetto, G.M.
1969 "Source Credibility and Personal Influence in Three Contexts: A Study of Dyadic Communication in a Complex Aerospace Organization." Ph.D. Dissertation. Purdue University.

Richetto, G.M., and H.S. Dennis, III.
1976 "Communication Audit of a Public School System." Paper presented at the Annual Meeting of the Academy of Management. Kansas City, Missouri.

Roberts, K., and C. O'Reilly.
1974 "Measuring Organizational Communication." Journal of Applied Psychology, 59: 321-326.

Ross, R.A.
1954 "A Case Study of Communication Breakdowns in the General Telephone Company of Indiana, Inc." Ph.D. Dissertation. Purdue University.

Sanborn, G.A.
1961 "An Analytical Study of Oral Communication Practices in a Nationwide Retail Sales Organization." Ph.D. Dissertation. Purdue University.

Simons, H.W.
1961 "A Comparison of Communication Attributes and Rated Job Performance of Supervisors in a Large Commercial Enterprise." Ph.D. Dissertation. Purdue University.

Sincoff, M.Z., and R.S. Goyer.
1977 "Communication Audit Critique: The Researcher's Perspective." The Journal of Business Communication, 15: 57-63.

Sincoff, M.Z., D.A. Williams, and C.E. Rohm, Jr. "Steps in
1976 Performing a Communication Audit." Paper presented at the Annual Meeting of the International Communication Association. Portland, Oregon.

Smith, R.L.
1967 "Communication Correlates of Interpersonal Sensitivity among Industrial Supervisors." Ph.D. Dissertation. Purdue University.

Spataro, L., and H.H. Greenbaum.
1975 "Workgroup Meetings: Dimensions of Effectiveness." Paper presented at the Annual Meeting of the Academy of Management. Seattle, Washington.

Tompkins, P.K.
1962 "An Analysis of Communication between Headquarters and Selected Units of a National Labor Union." Ph.D. Dissertation. Purdue University.

Tompkins, P.K.
1967 "Organizational Communication: A State of the Art Review." In G.M. Richetto (ed.), Conference on Organizational Communication. Huntsville, Alabama: George C. Marshall Space Flight Center, National Aeronautics and Space Administration (NASA).

Wiio, O.
1974 "Auditing Communication in Organizations: A Standard Survey -- LTT Communication Audit." Paper presented to Convention of International Communication Association. New Orleans, Louisiana.

Wiio, O.
1977 "Organizational Communication: Interfacing Systems." The Finnish Journal of Business Economics, Special Edition 2: 259-285.

Wiio, O.
1977 "Organizational Communication and Its Development." Research Report 2A771220, Institute for Human Communication. Helsinki.

Wiio, O.
1978 "Organizational Communication Studies: The LTT and OCD Procedures." Paper presented at the Annual Meeting of the International Communication Association. Chicago, Illinois.

Wohlking, W.
1970 "Attitude Change, Behavior Change: The Role of the Training Department." California Management Review, 13: 45-50.

Wood, R., N. Perrill, and J. Buley.
1975 "Pilot Testing the Communication Audit Questionnaire: First Field Test for the ICA Division 4, Communication Audit Project." Paper presented at the Annual Meeting of the International Communication Association. Chicago, Illinois.

Yates, M.P., D.T. Porter, G.M. Goldhaber, H. Dennis, and G. Richetto.
1976 "The ICA Communication Audit System: Results of Six Studies." Paper presented at Annual Meeting of International Communication Association. Portland, Oregon.

Zima, J.P.
1968 "The Counseling-Communication of Supervisors in a Large Manufacturing Company." Ph.D. Dissertation. Purdue University.

APPENDIX

THE CLIENT ORGANIZATION

History, Situational Factors, and Functional Relationships

The present Company was incorporated in 1961 with prior history dating back to 1921. During the period of this study, 1968-1973, the Company had 150 employees with operations in several parts of the United States and abroad. The operating division reviewed was located in a modern building in a county of New York State that enjoyed one of the highest average consumer income levels in the United States. Prior to 1962, the year in which the Company sold a public stock issue, the organization was managed and owned by members of two families, but since 1962, with the formation of an executive committee of six members, three of whom were not stockholders, the Company was less subject to complete family control and more responsive to outside stockholders, directors, and other members of top management. During the years covered by this study, the family management members were the officers of the organization and responsible for major policies.

The basic service furnished by the Company to its 2,500 active customers is the maintenance of a single source from which they may obtain thousands of different automotive replacement parts furnished by approximately 400 suppliers in the United States. This service permits the Company's customers to realize freight cost savings, better credit terms, special packaging accommodations, and faster delivery of replacement parts. In order to render this service the Company is organized into six major departments: (1) Export Marketing, (2) Domestic Marketing, (3) Materials Management and Manufacturing, (4) Product Research and Development, (5) Administration (Finance, Data Processing, Personnel), and (6) Branch Operations. In charge of each of these departments is an Operating Vice President reporting to the President and Chief Executive Officer. The top management team consists of the President and the six Vice Presidents, each of whom have two to four middle managers as subordinates; and in turn, each middle manager has the assistance of two to four supervisors in carrying out responsibilities.

During the period 1965-1974, average sales and earnings of the Company progressed 10% per year, which rate doubled sales in the eight years 1965-1973 and resulted in a 50% sales increase in the five-year period, 1968-1973, the particular period of this study. During this same five-year period the net earnings before income taxes doubled, rising from the level of $200,000 to $400,000 per year, and representing an increase in return on total assets from 5.8% in 1968 to 8.1% in 1973. However, the same ratio decreased from 5.8% in 1968 to 1.8% in 1971, before increasing to 7.5% in 1972, 8.1% in 1973, and 8.7% in 1974,

Personnel: Technical, Managerial and Social Factors

Supervisory positions have been filled, in general, by persons within the Company possessing the technical skills required in the particular area. There was no recognized need for supervisors with formal management training until 1966, when the problems of growth indicated a need to increase supervisory skills. In the period 1968-1973, only two of the six vice presidents had attended outside management training courses. All senior managers were males, ages 45-55, four with college degrees, three with degrees in business administration, and one with advanced training in management and communication. Middle managers were all male, ages 30-50, high school graduates, and one being a graduate of a university school of business. First-line supervisors, ages 25-50, were about equally divided as to male and female, with the female predominating in the office, and male occupying all supervisory positions in the warehouse.

The non-supervisory staff can be classified into three categories: (1) Female employees, second-income earners, wives or adult children; (2) Female employees, head of household; and (3) Male employees. The female second-income earners were members of families who owned suburban homes and were working to maintain individual needs, finance cars, home expansions and children's college education. The female head of household was frequently a widowed or divorced person with a dependent. The male non-supervisory was entirely composed of warehouse personnel who were either recent high-school graduates in their first or second full-time job, or on the other hand, older individuals who had not been successful in finding their way to higher paying jobs. All non-supervisory employees in the office were female, whereas there was a 2-to-1 ratio of female to male non-supervisory in the warehouse.

Non-supervisory personnel are unionized both in the office and warehouse. Supervisory personnel are not unionized. There has been only one strike in the history of the Company and this occurred in 1961, when there was a one-week strike by the union organization against the trade association in which the Company is a member. Union relations on a day-to-day basis are considered to be friendly with very few grievances carried to arbitration. The Company realizes that the union Organization is a permanent part of the scene and endeavors to work cooperatively with the elected representatives of the non-supervisory personnel.

Leadership Style and Motivational Elements

Based on observations and questionnaire results presented below, the Company appears to be near the Likert System 3 type of management leadership, quite a distance from Theory X elements, and conscious of Theory Y approaches. The chief executive exhibits both a task and people-oriented point of view in his personal relations and much of this is followed by his chief lieutenants in their handling of subordinates. However, at the level of the first-line supervisors, there is probably a wider range of leadership styles, due to lack of formal supervisory training and preconceived ideas about the best ways to obtain results.

The Company endeavors to quickly resolve problems relative to policies, personnel comforts, safety, and welfare benefits; and attempts to promote concern and care on the part of employees through formal programs that include workgroup meetings, annual personnel reviews, workplanning programs, job rotation, job enlargement and work procedure discussions. The effort is to obtain the maximum amount of self-starting by providing interesting jobs, recognition via promotions, and situations in which achievements may be experienced. It is recognized that this can only succeed part way, and the effort is one of trying to maximize, rather than considering that the maximum can be realized.

Management has tried to treat the problem of change with care, realizing the disruption that it can cause in morale. When a material change is planned, as in a move of operations from one location to another, there is considerable effort given to informing employees of the forthcoming event, and asking for criticisms and suggestions.

Communication Skills

On the inter-personal level, there is no reason to believe that the personnel in this organization have communication skills any different from the average population of persons with high-school education, ages averaging 40 years and ranging from 18 to 65 years. No in-house training has been provided by the Company and no indication has been given that any personnel have participated in formal educational courses in inter-personal communication. All levels of the supervisory staff are exposed to articles on that subject in management publications.

On the small-group level, the Company management has been very strong on the idea of meetings to promote planning, organizing and controlling. Consequently, in addition to the small-group structure that has been described below, there are standing committees that meet periodically to concentrate on budgets, product development, sales, and purchasing. The Personnel Department staff is alert to the importance of good small-group communication, and attempts to support meeting leaders with appropriate literature, hardware, and guides for successful meetings.

On the level of organization-wide communication, the Company does not consider that it is large enough to need a general newspaper for employees, but it does circulate a quarterly Data Processing Newsletter that is intended to inform supervisors as to the progress of various departments in placing operating procedures on mechanical equipment for the purpose of improving productivity and efficiency. The Personnel Department realizes the need for effective bulletin boards through which it attempts to provide information about Company policy, employment opportunities, and community affairs. Since 1969, the Company has followed the practice of holding three supervisory staff meetings per year on Saturday mornings for the express purpose of bringing all managerial and technical staff together to exchange comments in an informal atmosphere, and learn more about the Company in respect to finances and plans for the future. During these meetings it is most usual for top management and middle management personnel

to speak to the group of thirty supervisory and technical personnel on a one-to-many basis. This has served to develop the public speaking ability of these managers. To date, this type of on-the-job communication training has not been extended to first-line supervisors.

The Overall Communication System

By employing the technique of activity classification analysis, it is possible to furnish a fairly comprehensive view of the structured communication in this organization. Table A provides a summary of the internal verbal communication activities classified in terms of two variables, (1) communication networks, and (2) the number of participants involved. Four communication networks are identified: regulative, innovative, integrative, and informative-instructive. Activities within each of these networks are classified as to whether interpersonal, small-group, or organization-wide in nature. Twenty-three interpersonal activities are identified, five types of small-group meetings and twenty-five organization-wide communication events. Certain of the communication events are properly classified under more than one communication network. For example, the in-house publication is both informative, as well as integrative; and the workgroup meeting is informative, integrative and innovative in its various phases.

TABLE A

Internal Verbal Communication Activities
Classified by Number of Participants and Communication Network Objectives

Number of Participants	Regulative Network	Innovative Network	Integrative Network	Informative Network
INTER-PERSONAL (2 persons)	Supervisor directions and requests Supervisor-Subordinate meetings Job descriptions and standards Annual appraisal Special problem sessions Reports on operations Memoranda	Ad hoc problem resolution Supervisor-Subordinate idea development meetings Annual goals determination in work-planning program Informal get-togethers as in-house lunch meeting Reports on visits to other organizations, conventions, seminars	President's welcome letter to new employee Grievance discussion Progress review in work-planning program Annual appraisal Informal meeting of two organization members Supervisor-Subordinate informal conversation on personal matters	Hiring interview New employee orientation Memoranda Oral and written reports Cross-functioning
SMALL-GROUP (3-10 persons)	Meetings: directors, executive committee, departmental; crisis-type meeting as in fire, flood, strike	Meetings: directors, executive committee, departmental, sales development, crisis-type, budget, group lunch, workgroup problem-solving	Meetings: participative workgroup, interdepartmental, coffee-break, group lunch	Meetings (all types) Training in small groups

A-5

TABLE A
(continued)

Number of Participants	Regulative Network	Innovative Network	Integrative Network	Informative Network
ORGANIZATION-WIDE	Organization plans Policy statements Standard procedures Regulations Union contract Chart of organization Staff memos Organization chart	Suggestion program Procedure elimination and improvement program	"The grapevine" Literature available to personnel concerning plans, e.g., mergers President's talk to all employees in times of stress Periodic staff meeting of all supervisors	Data processing newsletter Bulletin-board notices Staff meetings Employee information booklets (orientation facts) Benefits brochure Statements of standard procedures Union contract Organization policy statements "The grapevine"